UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,598	01/16/2004	Ryuji Nishikawa	492322016100	5396

25227 7590 06/25/2007

MORRISON & FOERSTER LLP
1650 TYSONS BOULEVARD
SUITE 400
MCLEAN, VA 22102

EXAMINER	
LIN, JAMES	
ART UNIT	**PAPER NUMBER**
1762	
MAIL DATE	**DELIVERY MODE**
06/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/758,598	NISHIKAWA ET AL.	
	Examiner	Art Unit	
	Jimmy Lin	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-6 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 16 January 2004 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Nishikawa et al. (U.S. Publication No. 2003/0222861).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed **but not claimed in the reference** was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131. Presently, the reference discloses *and* claims the invention.

Nishikawa discloses a method of repairing an organic EL element. A foreign substance is detected to be adhered to an organic EL layer in a pixel. Instead of directly irradiating the foreign substance with laser light, an irradiation region is set in the peripheral region of the foreign substance. By irradiating the laser, the organic EL layer becomes highly resistive [0069]-[0070]. The organic EL layer can be formed between an anode layer and a cathode layer [0014].

Claim 2: The laser beam can be irradiated four times (i.e., a plurality of times) in peripheral regions above, below, to the right of, and to the left of the foreign substance [0073].

Claims 3-4: The laser wavelength can be in a range shorter than 532 nm [0074].

Claims 5-6: The irradiation region can be 5 μm to 10 μm away from the foreign substance [0072].

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kodama (JP 2000-195677).

Kodama discloses an electroluminescent (EL) display including an EL element having an EL layer 3 formed between an anode and a cathode (drawing 22). The EL display can have a plurality of pixels [0011]. After detecting a foreign substance adhered to an EL element, laser light is irradiated at such a defective part [0081]. A short circuit can be prevented with the laser repair method [0006].

The limitation of "a high resistivity region" is a relative term and has been given little patentable weight. Accordingly, Kodama teaches that a region having resistivity is formed between the anode and the cathode.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 2 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kodama '677.

Kodama is discussed above, but does not explicitly teach that the laser beam irradiation is repeated a plurality of times. However, one of ordinary skill in the art would have expected similar results using multiple steps of laser beam irradiation to repair the EL element defect as compared to only using one laser beam irradiation step. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have irradiated the EL element defect a plurality of times with a reasonable expectation of success in order to repair the EL element.

Claims 5-6: Kodama does not explicitly teach that the irradiated region of the display panel is 5 μm to 10 μm away from the foreign object. However, Kodama teaches that the luminescence around the repaired portion will slowly degrade and diminish such that the entire pixel may become non-luminescent with time [0081]-[0082]. Thus, the irradiated region can be beyond the immediate area of the foreign substance as long as the irradiated region is within a single pixel, since the entire pixel will eventually become non-luminescent anyway. It would have been obvious to one of ordinary skill in the art at the time of invention to have irradiated any portion of the EL element around the foreign substance within a single pixel, including the claimed distance away from the foreign substance, with a reasonable expectation of success in order to have further prevented a short-circuit.

7. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kodama '677, as applied to claim 2 above, in view of Takahara (U.S. Patent No. 6,219,113).

Kodama is discussed above, but does not explicitly teach that the laser beam wavelength can be 532 nm or lower. Kodama does teach that the laser repair method of a liquid crystal display (LCD) can be applied to an EL display [0010]. Accordingly, Takahara teaches a method of repairing a pixel defect in an LCD. The laser used can have a wavelength of 351 nm (abstract; col. 69, line 55-col. 70, line 37). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have used a laser having a wavelength of 351 nm as the particular laser of Kodama with a reasonable expectation of success because Kodama teaches that the laser repair method of an LCD can be used and because Takahara teaches that such a laser can be used to repair an LCD defect. Overlapping ranges are *prima facie* evidence of obviousness (see MPEP 2144.05.I.).

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-4 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10-12 of copending Application No. 10/392,258. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of '258 fully encompass the present claims. For example, claim 10 of '258 has an additional limitation of "altering characteristics of organic matter in the organic layer...without removing the organic layer" over present claim 1. Claim 10 of '258 does not claim an EL layer formed between an anode layer and a cathode layer. However, such a structure must necessarily be present in an organic EL element for it to function as designed.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Asai (JP 2003-178871) teaches a method of repairing a defective portion of an organic EL layer (abstract; [0008]).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Lin whose telephone number is 571-272-8902. The examiner can normally be reached on Monday thru Friday 8AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JL

JL

KEITH HENDRICKS
PRIMARY EXAMINER